INVESTIGATIVE PHOTOGRAPHY

for

EHS

Professionals

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Photographs *can:*

- be a work of art
- express a message
- be a record

What *Skills* do you need?

The *EH&S* Professional must be competent enough to take a photograph based on:

1. Technical Skills
2. Photojournalism Skills
3. Forensic Skills

Photo evidence *Presentations*

Review standard 14 questions photographers are asked in a legal proceedings

Taking too many photos

Presentation formats, photo size, sleeved for marking

Maintain a portfolio of practice

do the photos get us *there*

Good photographic evidence takes the Judge and Jury back to the event without leaving their seats

Most common reason for field trips during trials

Policy Objectives *must:*

Establish in *writing:*

1. *Who* will *take* the photos and why

2. *Who* will *own* them

3. *Procedures* to be used by photographers

Copyright Law *establishes:*

Who ever takes the photograph owns it and all rights to it automatically unless there is a written agreement otherwise either before the photo is taken or by mutual agreement after the photo is taken.

Standard Procedures *are:*

- Photographer Safety
- Chain of Custody
- Accident Scene Documentation
- Evidence Collection
- Marking and Labeling
- Photo Logs

Too Close

A photographer must be able to explain the safe procedures in effect to get a photo.

Photographing Accident Scenes

- Photographer Safety
- Understanding light, lenses, film speed
- Establishing Photographs
- Three Perspective Photo Documentation
- 360 DEGREE Documentation
- Chain of Custody
- Techniques for Evidence Collection
- Preparing for Legal Proceedings

Techniques for *Evidence Collection*

1. Three Perspective photo documentation
2. 360-degree documentation
3. Establishing photo

Three Perspective Documentation

Overview: The entire site.

Midrange: The specific area of the object or condition.

Close-up: The object or condition elements.

360 degree Documentation

- 360 degree circumnavigation of the scene "outside looking in"
- 360 degree pivot "inside looking out"
- Panoramic photographs should overlap about 50 percent

Establishing Photographs

- A head on photograph to document the size, shape, location or *address* of the structure.
- Establishes your *NORTH ZERO DEGREES*.
- Establish a *reference landmark* for long range and midrange photos.
- A picture *illustrating what a person saw* should be taken from eye level at that person's position.

has the *scene* been *altered*

- ☑ Who would know and what information did you get?
- ☑ Where were subjects moved?
- ☑ Who moved them?

Photograph anything likely to be *moved*

- Medical evidence
- Personal effects and equipment
- Instrument readings and measurements
- Any evidence likely to be removed by weather, vehicle traffic or clean up.
- **EXAMPLES:** ground scars; heat evidence; liquids

Standard *Four:*

General photos from all four sides with the distance for each being approximately the same.

North, South, East, West

Front, Right Side, Rear, Left Side

Orientation photographs

Photographs of evidence should have enough distance from the subject to show a relationship to other evidence.

Reference objects for photographs

- In close-ups, include a familiar object such as a clipboard or ruler to show the scale involved.
- When photographing liquids or when color is significant use a color scale.
- Photograph without the reference first.

Use a Color Scale Reference

when photographing:

- Stains, Liquids, Powders
- Documentation and Verification Issues
- Digital photos and software issues

What did the *witness see?*

Photograph from the witnesses viewpoint when possible and include the same lighting conditions.

The photo should show how the witness saw it.

EXAMPLES: position of the sun

Why *Sketch?*

- Shows how evidence was collected
- Orients your photos to a map for easy reference
- It makes you look like a professional

Sample Photo Log

Every photo is accounted for

Photo No.	Camera Shot	Photographer	Date	Time	Photo Description
1	4	J. Wenzel	07/16/98	1200	Overview of site far right from back of building 1.
2	5	J. Wenzel	07/16/98	1201	Overview of site far right same shot as 4 different camera setting.

Photograph *Information Map*

provides 3 types of information:

- Photo Description
- Subject Description
- Camera Description

Low Light Formula

- Film 800
- F - stop higher = less light in
- Shutter Slow more light

No Flash Formula

- higher speed film
- lower f-stop
- slower shutter speed

Fires

Low Contrast

Tough on equipment

References are critical

A Great Investigative Photographer begins work by asking:

- What is the purpose of the photograph?
- What is the subject of the photograph?
- What information can be obtained through examination of the photograph?

Techniques for *Film Exposure*

You can control for light 3 ways:

- ☑ through the film you choose
- ☑ through the amount of light you let into the camera in time
- ☑ adding more light including artificial light

Light Measuring Equipment

- Continuously measures light and reflected light
- Reports: F stop, film speed, shutter speed
- Measures for multiple flash units
- Correction values and contrast extremes
- Frames / second

Existing Light and *F*/ Stop

Large Apertures used in dim lighting allow shutter speeds fast enough to hold the camera.

Fast Action Stills

- F – Stop larger aperture 12 feet
- ISO 100
- Shutter Speed 1/500 - 1/1000

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